

# Mineral Industry Surveys

#### For information, contact:

Patricia A. Plunkert, Aluminum Commodity Specialist U.S. Geological Survey 989 National Center Reston, VA 20192

Telephone: (703) 648-4979, Fax: (703) 648-7757

E-mail: pplunker@usgs.gov

Benjamin S. Goff (Data) Telephone: (703) 648-7962 Fax: (703) 648-7975 E-mail: bgoff@usgs.gov

Internet: http://minerals.usgs.gov/minerals

## **ALUMINUM IN OCTOBER 2005**

Domestic primary aluminum production in October was 207,483 metric tons (t), according to the U.S. Geological Survey. The average daily production rate was 6,693 t, 1% higher than that of the previous month but 2% below the rate for October 2004. The monthly average U.S. market price of primary aluminum ingot increased to 91.38 cents per pound in October from 86.45 cents per pound in September, according to Platts Metals Week. The American Metal Market buying price range for aluminum used beverage cans (UBCs) increased during October. The price range began the month at 59–60 cents per pound. On October 11, the price range increased to 61–63 cents per pound. On October 18, the price range increased a penny to 62–64 cents per pound and remained at this level through the end of the month.

#### U.S. Trade

Total imports for consumption of aluminum for the first 3 quarters of 2005 increased 18% compared with those for the same period in 2004. Imports of metal and alloys and of semifabricated materials increased 18% and 33%, respectively; imports of scrap, however, decreased 10% compared with those for the same period in 2004. Canada remained the leading

shipper of materials to the United States, supplying one-half of total U.S. imports in the first 9 months of the year, followed by Russia with 18%.

Total aluminum exports in the first 3 quarters of 2005 increased 31% compared with those for the first 9 months of 2004. Exports were higher in all three categories detailed in table 7 and were led by a 67% increase in exports of aluminum scrap. Exports of metal and alloys increased 14%, and exports of semifabricated material increased 10% compared with those for the same period in 2004. Canada, China, and Mexico were the major recipients of U.S. aluminum materials, accounting for almost 80% of total U.S. exports in the first 9 months of 2005.

#### Update

The monthly average U.S. market price of primary aluminum ingot increased in November to 96.31 cents per pound. The American Metal Market buying price range for aluminum UBCs also increased during November. On November 1, the price range increased to 63–65 cents per pound, and on November 8, it increased another penny to 64–66 cents per pound. On November 22, the price range increased to 66–68 cents per pound and remained at this level through the end of the month.

 $\label{eq:table 1} \text{COMPONENTS OF ALUMINUM SUPPLY}^1$ 

## (Thousand metric tons)

					Impor	ts for consumption			
	Primary	Secor	ndary recover	ry <sup>2</sup>	Metals and alloys,	Plates, sheets, bars,		Total new	Total stocks, end of
Period	production	New	Old	Total	crude	etc.	Total	supply <sup>3</sup>	period <sup>4</sup>
2004	2,516	1,870	1,160	3,030	3,250	938	4,180	9,730 <sup>r</sup>	1,470
2004:	<del>_</del>								
October	211	159	106	265	286	84	370	847	1,390
November	207	149	103	252	272	84	356	815	1,420
December	211	138	94	231	294	82	377	819	1,470
January-October	2,099	1,540	1,000	2,540	2,680	771	3,450	8,090	1,390
2005:									
January	209	163	95	258	334	90	425	892	1,510
February	191	157	91	248	289	97	386	825	1,450
March	214	171	96	267	262	105	367	847	1,480
April	211	162	95	257	372	104	476	943	1,500
May	214	159	98	257	372	104	476	947	1,520
June	206	153	96	249	324	107	431	886	1,500
July	210	170	96	267	324	104	428	904	1,550
August	208	167	96	262	264	110	374	845	1,550
September	199	157 <sup>r</sup>	91 <sup>r</sup>	248	282	97	379	826	1,590
October	207	151	95	246	NA	NA	NA	NA	NA
January-October	2,069	1,610	949	2,560	NA	NA	NA	NA	NA

<sup>&</sup>lt;sup>r</sup>Revised. NA Not available.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits, except "Primary production"; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Metallic recovery from purchased, tolled, or imported scrap, expanded for full coverage of industry.

<sup>&</sup>lt;sup>3</sup>Primary production, secondary recovery, and imports for consumption.

<sup>&</sup>lt;sup>4</sup>Inventory levels reflect total for both U.S. and Canadian producers; data from the Aluminum Association Inc.

TABLE 2 ESTIMATED FULL COVERAGE CONSUMPTION OF AND METALLIC RECOVERY FROM PURCHASED NEW AND OLD ALUMINUM SCRAP  $^{\rm 1}$ 

## (Thousand metric tons)

			Inte	grated	Inde	pendent							
	Secondary		alur	ninum	r	nill	Other						
	sm	smelters		companies		fabricators		Foundries		consumers		Total	
	Con-		Con-		Con-		Con-		Con-		Con-		
	sump-	Metal	sump-	Metal	sump-	Metal	sump-	Metal	sump-	Metal	sump-	Metal	
Period	tion	recovery	tion	recovery	tion	recovery	tion	recovery	tion	recovery	tion	recovery	
2004	1,800	1,330	754	668	994	929	101	90	9	8	3,650	3,030	
2004:													
October	148	110	64	56	97	91	9	8	(2)	(2)	319	265	
November	145	107	64	56	87	81	9	8	(2)	(2)	305	252	
December	132	97	61	54	77	72	8	7	(2)	(2)	279	231	
January-October	1,400	1,040	630	558	917	856	93	83	4	4	3,050	2,540	
2005:													
January	147	106	64	57	93	87	9	8	(2)	(2)	313	258	
February	146	105	63	56	84	79	8	7	1	1	301	248	
March	150	108	67	60	97	91	8	7	1	1	323	267	
April	146	106	66	59	90	84	8	7	1	1	311	257	
May	151	109	69	61	85	80	8	7	1	1	313	257	
June	138	103	67	60	84	79	9	8	1	1	299	249	
July	141	102	92	83	79	74	8	7	1	1	321	267	
August	151	109	77	69	82	77	8	7	(2)	(2)	319	262	
September	148	107	65	58	80	75	8	7	(2)	(2)	302	248	
October	154	112	55	49	83	78	8	7	(2)	(2)	302	246	
January-October	1,470	1,070	685	612	857	804	82	72	5	5	3,100	2,560	

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 3 CONSUMPTION OF AND RECOVERY FROM PURCHASED NEW AND OLD ALUMINUM SCRAP IN OCTOBER  $2005^1$ 

## (Metric tons)

			Calc	ulated	
	Consu	mption	metallic	recovery	
	Tabulated	Estimated	Tabulated	Estimated	
	reports	full coverage	reports	full coverage	
Secondary smelters	129,000	154,000	93,200	112,000	
Integrated aluminum companies	55,400	55,400	48,700	48,700	
Independent mill fabricators	69,300	83,100	64,700	77,700	
Foundries	7,050	8,460	6,240	7,480	
Other consumers	355	426	355	426	
Total	261,000	302,000	213,000	246,000	

Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Less than ½ unit.

 ${\it TABLE~4}$  PURCHASED AND TOLL-TREATED ALUMINUM-BASE SCRAP AND SWEATED PIG IN OCTOBER  $2005^1$ 

		Octo	ber		January-October <sup>2</sup>		
	Stocks,	Net	Melted or	Stocks,	Net	Melted or	
	opening	receipts3	consumed	closing	receipts3	consumed	
New scrap:							
Extrusions	24,300	55,300	54,900	24,700	622,000	625,000	
Can stock clippings	838	18,500	18,500	820	255,000	257,000	
Other wrought sheet/clippings	8,080	27,200	27,400	7,980	238,000	239,000	
Castings	1,470 <sup>r</sup>	9,350	9,240	1,580	82,300	82,000	
Borings and turnings	7,990 <sup>r</sup>	12,900	13,000	7,890	134,000	130,000	
Dross and skimmings	4,730 <sup>r</sup>	39,200	39,600	4,350	379,000	379,000	
Total new scrap	47,500 <sup>r</sup>	163,000	163,000	47,400	1,710,000	1,710,000	
Old scrap:							
Used castings	5,460 <sup>r</sup>	16,400	16,600	5,240	118,000	117,000	
Used extrusions	137	295	295	137	2,950	2,950	
Used cans (shredded, loose, baled)	2,110 <sup>r</sup>	59,900	60,100	1,920	616,000	619,000	
Other wrought products	5,690	8,230	8,230	5,690	135,000	135,000	
Fragmentized shredder (auto shredder)	3,400	11,700	12,000	3,070	108,000	108,000	
Total old scrap	16,800 <sup>r</sup>	96,500	97,200	16,100	980,000	981,000	
Sweated pig	289	819	818	290	7,280	7,580	
Total all classes	64,500 <sup>r</sup>	260,000	261,000	63,700	2,700,000	2,700,000	

rRevised.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes revised data from previous month(s).

<sup>&</sup>lt;sup>3</sup>Includes data on imported aluminum-base scrap.

TABLE 5 ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED STATES FOR 2005  $^{\rm 1,2}$ 

		Octo	ber		January-October <sup>3</sup>	
	Stocks,		Net	Stocks,		Net
	opening	Production	shipments	closing	Production	shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	5,630 <sup>r</sup>	1,980	2,000	5,620	16,500	13,800
380 and variations	2,220 <sup>r</sup>	18,200	17,400	3,050	169,000	170,000
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	985 <sup>r</sup>	1,830	1,860	958	18,500	18,600
No. 319 and variations	2,620 <sup>r</sup>	6,890	6,560	2,950	65,800	65,300
F-132 alloy and variations	779 <sup>r</sup>	2,300	2,310	773	18,900	18,900
Al-Zn alloys	124 <sup>r</sup>	151	161	114	1,650	1,670
Al-Si alloys (0.6% to 2.0% Cu)	39	46	46	39	458	458
Al-Cu alloys (1.5% Si, max.)	45	325	325	45	3,250	3,250
Other <sup>4</sup>	5,150 <sup>r</sup>	5,140	4,240	6,050	59,800	60,100
Wrought alloys:						
Extrusion billets	10,800	24,600	24,500	10,900	246,000	246,000
Total all alloys	28,400 r	61,500	59,300	30,500	600,000	598,000
Less:						
Primary aluminum consumed	XX	10,900	XX	XX	123,000	XX
Primary silicon consumed	XX	2,360	XX	XX	22,400	XX
Other alloying ingredients consumed	XX	490	XX	XX	6,720	XX
Net metallic recovery from aluminum						
scrap and sweated pig consumed in						
production of secondary aluminum						
ingot <sup>5</sup>	XX	47,700	XX	XX	447,000	XX

<sup>&</sup>lt;sup>r</sup>Revised. XX Not applicable.

<sup>&</sup>lt;sup>1</sup>Excludes integrated aluminum companies.

<sup>&</sup>lt;sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>3</sup>Includes revised data from previous months.

<sup>&</sup>lt;sup>4</sup>Includes alloys No. 12, Al-Mg, Al-Si-Cu-Ni, aluminum-base hardeners, variations of these alloys, plus other aluminum alloys.

<sup>&</sup>lt;sup>5</sup>No allowance made for melt-loss of primary aluminum and alloying ingredients.

 ${\bf TABLE~6}$  U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN SEPTEMBER  $2005^1$ 

	Metals and a	illoys, crude	Plates, sheet	ts, bars, etc.	Sci	rap	Total	
	-	January-		January-	-	January-		January-
Country	September	September	September	September	September	September	September	September
Argentina	5,400	48,400	7	2,970			5,410	51,400
Australia	4,990	51,100	7	105		1,210	4,990	52,400
Bahrain	5,350	9,760	1,240	11,600			6,590	21,400
Belgium		18	1,120	10,500		28	1,120	10,600
Brazil	7,900	138,000	2,960	27,200		126	10,900	166,000
Canada	195,000	1,440,000	43,500	391,000	26,100	230,000	265,000	2,060,000
China	4,490	61,800	10,900	91,700		126	15,400	154,000
France	58	655	263	5,300	(2)	55	321	6,010
Germany	225	1,820	9,280	86,600	35	274	9,540	88,700
Hungary			233	3,150			233	3,150
Italy	100	610	191	2,170			292	2,790
Japan	46	478	1,360	14,700	39	398	1,440	15,600
Korea, Republic of	12	75	209	2,250			221	2,330
Mexico			1,930	16,800	8,420	82,500	10,300	99,400
Netherlands		331	131	2,120			131	2,450
Norway		4,060	(2)	106		2	(2)	4,170
Russia	21,000	682,000	4,310	46,600	801	5,330	26,200	734,000
South Africa		59,400	5,300	38,000			5,300	97,400
Spain	4	36	221	2,570		106	225	2,710
Sweden		1,310	335	2,780			335	4,080
Switzerland	36	702	535	3,180			571	3,880
Tajikistan		96,700						96,700
United Arab Emirates	9,000	54,800	107	279	157	666	9,260	55,800
United Kingdom	17	20,100	415	5,720	96	1,680	528	27,500
Venezuela	22,000	112,000	726	9,190	255	8,070	23,000	130,000
Other	6,080	36,200	11,800	141,000	3,610	36,400	21,500	213,000
Total	282,000	2,820,000	97,100	917,000	39,500	367,000	419,000	4,110,000

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Less than ½ unit.

 ${\bf TABLE~7}$  U.S. EXPORTS OF ALUMINUM IN SEPTEMBER 2005  $^1$ 

	Metals and a	ılloys, crude	Plates, sheet	ts, bars, etc.	Sc	rap	Total		
		January-		January-		January-		January-	
Country or territory	September	September	September	September	September	September	September	September	
Australia	72	421	140	1,220		23	211	1,660	
Azerbaijan				2				2	
Belgium	5	588	825	5,980		214	830	6,780	
Brazil	12	188	279	6,420	65	1,500	356	8,110	
Canada	10,600	95,200	40,400	372,000	10,600	111,000	61,600	578,000	
China	92	378	2,790	29,500	56,700	406,000	59,600	436,000	
Czech Republic			9	237			9	237	
Dominican Republic	4	14	53	353			57	367	
France	17	838	830	6,360	2	48	849	7,250	
Germany	51	678	778	6,380	17	273	846	7,330	
Hong Kong	1	207	610	5,270	888	7,990	1,500	13,500	
India	14	158	59	392	772	7,520	846	8,070	
Israel	21	549	212	2,160			233	2,710	
Italy		175	332	2,280			332	2,460	
Japan	113	3,500	812	7,350	3,100	24,900	4,030	35,700	
Korea, Republic of	67	828	589	10,000	8,960	95,500	9,620	106,000	
Malaysia	1	24	205	5,370	20	107	227	5,500	
Mexico	15,900	137,000	25,100	167,000	7,060	50,700	48,000	355,000	
Netherlands	6	110	41	408	2	39	49	558	
Russia	31	59	(2)	37	14	26	45	122	
Saudi Arabia		8	1,750	22,800			1,750	22,800	
Singapore	(2)	319	113	1,800		552	113	2,670	
Spain	4	58	105	845		196	109	1,100	
Sweden		9	24	307			24	316	
Taiwan	38	244	391	6,740	3,410	38,100	3,840	45,100	
Thailand	56	342	663	5,840	251	4,740	969	10,900	
Ukraine			(2)	1			(2)	1	
United Kingdom	6	263	1,040	12,000	54	225	1,100	12,500	
Venezuela		12	103	1,360		21	103	1,390	
Other	183	3,400	3,350	28,200	1,690	30,600	5,220	62,200	
Total	27,200	246,000	81,700	708,000	93,700	781,000	203,000	1,740,000	

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Less than ½ unit.